L. PORTER.

BRAKE LEVER STRUT.

APPLICATION FILED JULY 12, 1909.

950,640. Patented Mar. 1, 1910.

FIG. 4.

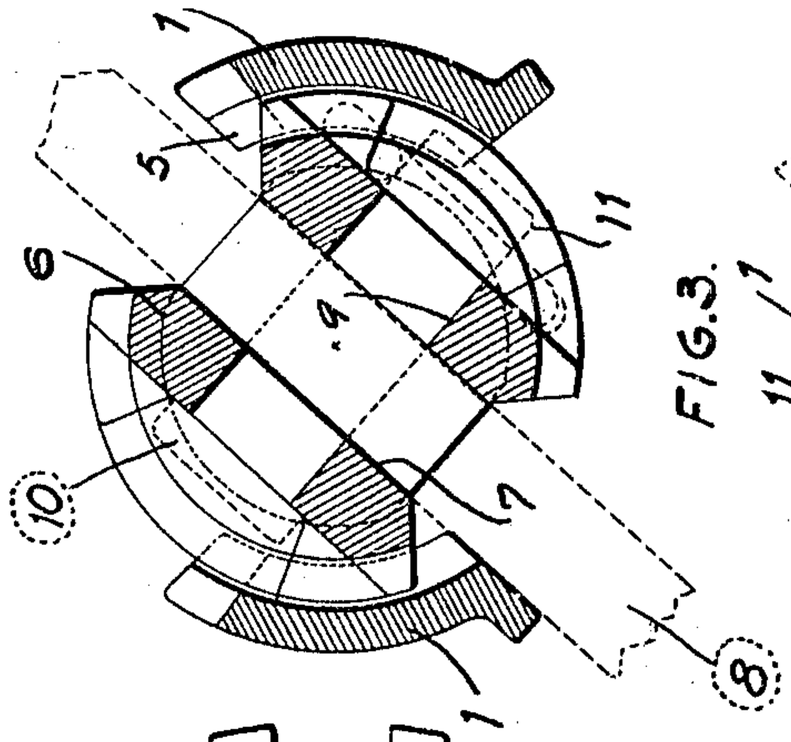


FIG. 3.

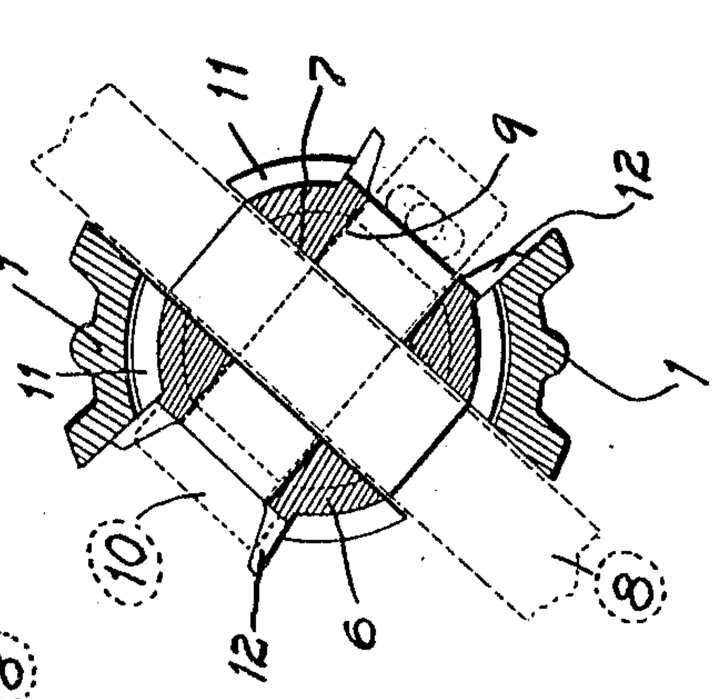


FIG. 1.

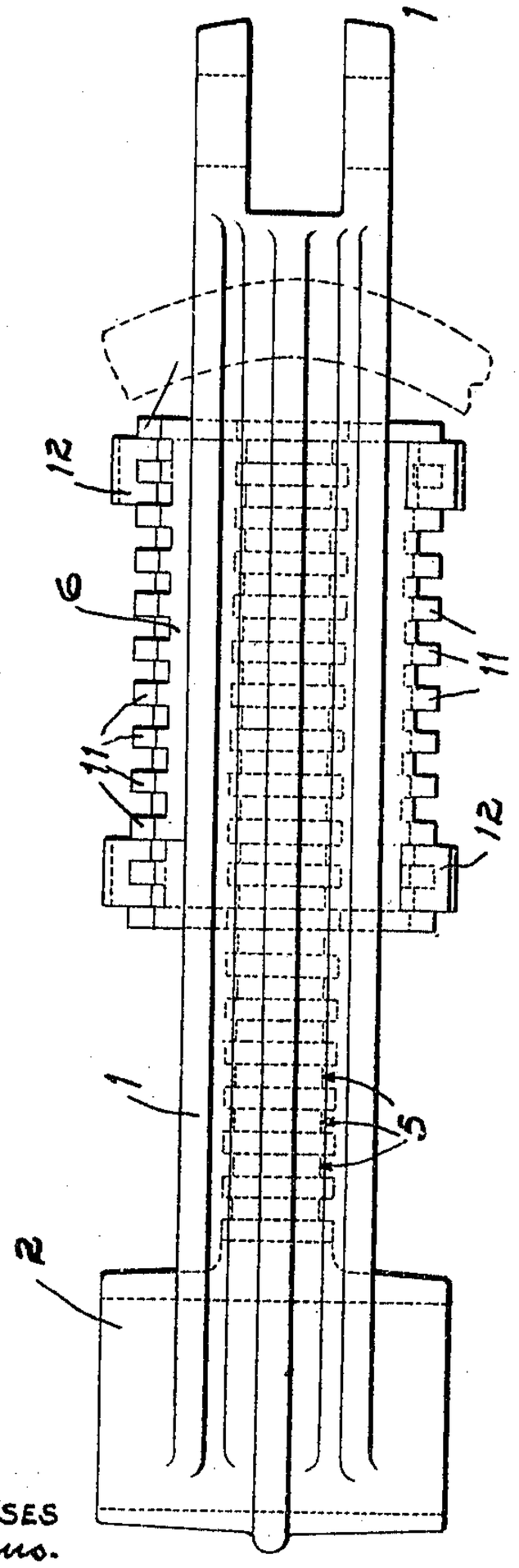
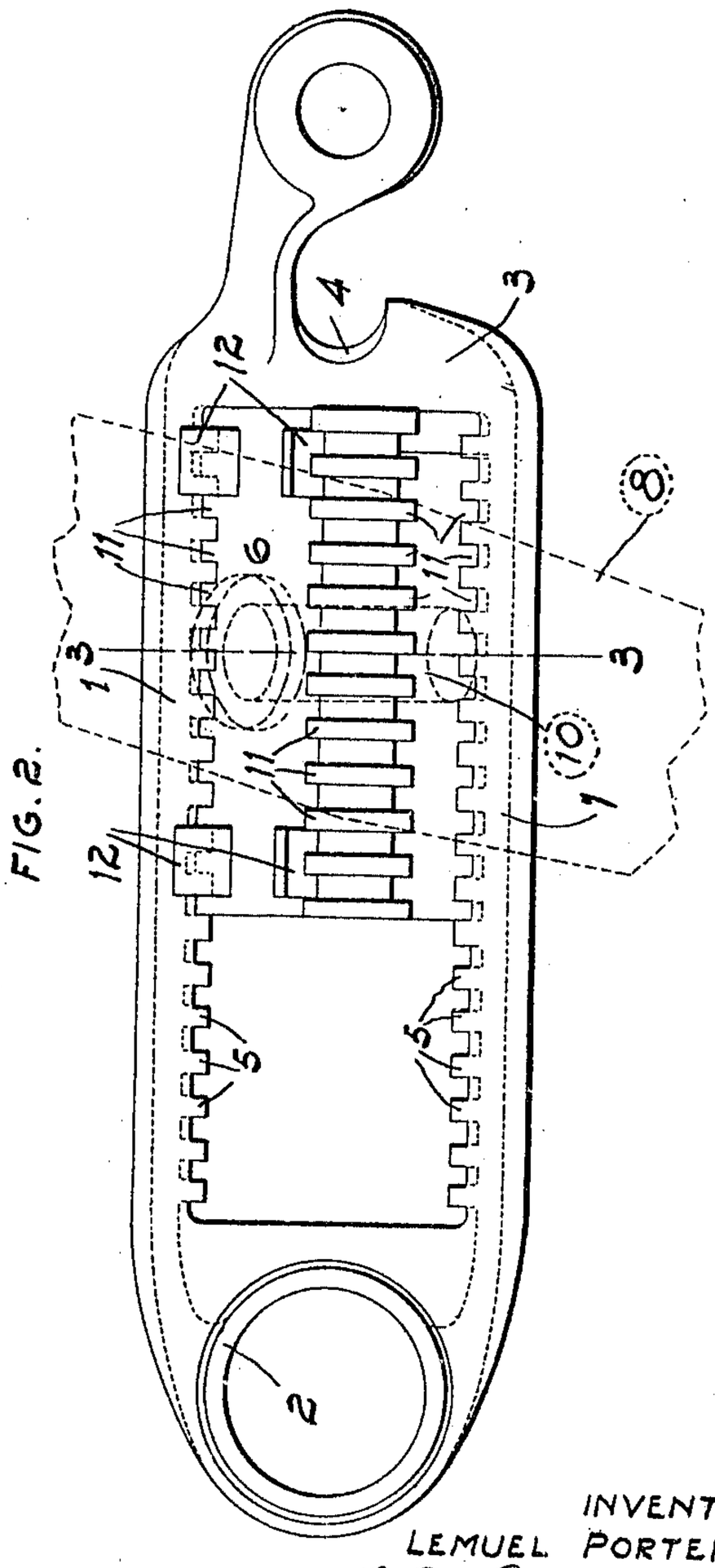


FIG. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

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BRAKE-LEVER STRUT.

950,640. Specification of Letters Patent. Patented Mar. 1, 1910.

Application filed July 12, 1909. Serial No. 507,135.

To all whom it may concern:

Be it known that I, LEMUEL PORTER, a citizen of the United States, residing at Chicago, Illinois, have invented a certain new and useful Improvement in Brake-Lever Struts, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a brake lever strut of my improved construction. Fig. 2 is a side elevation of the strut. Fig. 3 is a cross section taken on the line 3—3 of Fig. 2. Fig. 4 is a cross section taken through the center of a modified form of my improved strut.

My invention relates to a brake lever strut particularly designed for trussed brake beams, although with slight modifications the construction can be advantageously employed in connection with struts on so-called solid beams.

The principal object of my invention is to provide a strut with an adjustable block which receives the pivot or fulcrum pin of the brake lever, thereby enabling the brake lever to be adjusted forward or backward in the strut and also permitting the lever to be shifted from one angular position to another, as is required in right and left hand beams.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described and claimed.

As shown in the drawings, the main body of my improved strut is cast or formed in a single piece, and comprises a pair of parallel bars 1, the same being arranged one immediately above the other, said bars being united at one end by a sleeve 2 which embraces the central portion of the compression member of the beam. The opposite ends of the bars 1 are united by a block 3, in which is formed a horizontally disposed notch 4 which receives the central portion of the tension member of the beam.

Formed integral with the inner faces of the bars 1 are rows of teeth 5, the same being segmentally curved lengthwise and concentric with the axial line of the body of the strut. The pivot pin block 6, or the block on which the brake lever is fulcrumed, is substantially cylindrical in form and provided with a diametrically arranged slot 7 through which the brake lever 8 passes, and formed through the central portion of the block, at right angles to the slot 7 is an aperture 9 which receives the brake lever pivot or fulcrum pin 10, of standard design.

Formed integral with the block 6 and on the exterior thereof, immediately adjacent the sides of the slot 7, are teeth 11 which are adapted to engage and interlock between the rows of teeth 5 on the body of the strut.

Formed integral with the block 6 adjacent the ends and between the pairs of rows of teeth 11 are lugs 12 which are adapted to engage against the edges of the bars 1, thereby performing the function of stops to limit the rotary motion of the pivot pin block in the strut.

The four rows of teeth 11 on the block 6 are arranged in pairs with the individual rows of each pair directly opposite one another, and therefore, when the block 6 is properly positioned in the strut, a pair of the rows of teeth 11 will be in engagement or interlocked with the two rows of teeth 5. Such construction permits the block 6 to be rotated approximately a quarter of a turn, or a sufficient distance to shift the slot 7 from one position to another so as to accommodate the brake lever 8 either in right or left hand position. The block 6 may be readily disengaged from its position between the bars 1 when so rotated as to disengage the rows of teeth 5 and 11, and then drawing said block horizontally outward. By thus making the block removable it may be adjusted forward and backward in the strut, thereby changing the position of the pin on which the brake lever is pivoted.

In the modified form of the strut shown in Fig. 4, the bars forming the body of the strut are arranged directly opposite one another in a horizontal plane, and the adjustable block, which is normally positioned between said bars and interlocked therewith,

is removed by withdrawing the same vertically from its position between said bars.

A strut of my improved construction is comparatively simple, comprises but two parts, is readily adjustable, and when positioned on a beam permits the brake lever to be hung either on the right or left hand side.

It will be readily understood that minor changes in the construction and form of my improved device can be made and substituted for those herein shown and described without in the least departing from the spirit of my invention.

I claim:

1. The combination with a brake lever strut, of an interiorly arranged adjustable pivot pin block having an interlocking engagement with said strut, which block is partially rotated to effect the interlocking engagement.

2. The combination with a brake lever strut, of an interiorly arranged adjustable pivot pin block having an interlocking engagement with said strut, which block is partially rotated to effect the interlocking engagement, and stops on the block to limit the rotary motion thereof in one direction.

3. The combination with a strut, of an interiorly arranged adjustable pivot pin block, and interlocking teeth formed on the strut and block, which block is partially rotated to effect interlocking engagement of the teeth.

4. The combination with a strut, of an interiorly arranged adjustable pivot pin block, interlocking teeth formed on the strut and block, which block is partially rotated to effect interlocking engagement of the teeth, and stops formed on the block for limiting the rotary motion thereof in one direction.

5. A brake lever strut comprising a member having oppositely arranged rows of teeth, and an interiorly arranged pivot pin block having rows of teeth adapted to interlock with the rows of teeth on the body of the strut by a rotary movement of said block.

6. A brake lever strut comprising a rigidly held body portion and a rotary pivot pin block arranged therein and having an interlocking connection with the body of the strut.

7. A brake lever strut comprising a rigidly held body portion, a rotary pivot pin block having an interlocking connection with the body of the strut, and stops on said blocks for limiting the rotary motion thereof in one direction.

8. A brake lever strut comprising a rigidly held body, oppositely disposed rows of teeth thereon, a rotary pivot pin block adjustably arranged in the body of the strut, and a plurality of oppositely disposed rows of teeth on said block, which teeth are adapted to interlock with the rows of teeth on the body of the strut.

9. A brake lever strut comprising a member, the ends of which are adapted to receive the compression and tension members of a brake beam, an adjustable block removably positioned in the body of the strut and having interlocking engagement therewith, and which interlocking engagement is effected by a rotary movement of said block relative to the body of the strut.

10. The combination with a brake lever strut provided with a row of teeth, of a cylindrical pivot pin block adapted to be positioned in the strut, and a plurality of rows of teeth on the block, which teeth are adapted to interlock with the teeth on the strut.

11. The combination with a brake lever strut provided with a row of teeth, of a cylindrical pivot pin block adapted to be positioned in the strut, a plurality of rows of teeth on the block, which teeth are adapted to interlock with the teeth on the strut, and stops formed on the block for limiting the rotary movement thereof.

12. The combination with a brake lever strut, of a rotary pivot pin block removably arranged in the body of the strut and having an interlocking engagement therewith.

13. The combination with a brake lever strut constructed in one piece, of a one-piece slotted pivot pin block longitudinally adjustable within the body of said strut.

14. The combination with a brake lever strut constructed in one piece, of a one-piece slotted pivot pin block longitudinally adjustable within the body of said strut and having interlocking engagement therewith.

15. The combination with a brake lever strut constructed in one piece, of a one-piece slotted pivot pin block adjustably arranged in the body of said strut and having interlocking engagement therewith at two different points.

16. The combination with a one-piece brake lever strut, the ends of which are formed to receive the compression and tension members of a brake beam, and a rotary pivot pin block longitudinally adjustable within the body of the strut.

17. A brake lever strut constructed in a single piece, having a longitudinally-disposed slot adapted to receive a pivot pin block, and means for longitudinally adjusting said block therein.

18. A brake lever strut constructed in a single piece, having a longitudinally-disposed slot adapted to receive a pivot pin block, the ends of which strut are adapted to receive the compression and tension members of a brake-beam, and means for longitudinally adjusting said block.

19. The combination with a one-piece brake lever strut, of a slotted rotary pivot

pin block longitudinally adjustable within the body of the strut.

20. The combination with a one-piece brake lever strut, of a slotted rotary pivot pin block longitudinally adjustable within the body of the strut and having interlocking engagement therewith.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 26th day of June 1909.

LEMUEL PORTER.

Witnesses:

EDWARD T. WALKER,

JOSEPH W. WEINLAND.